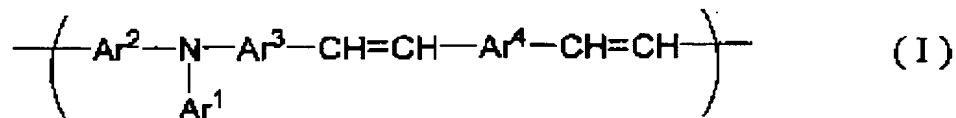


REMARKS/ARGUMENTS

Applicants' representative would like to thank Examiner Truong for the courteous and helpful discussion of the present application on July 20, 2006. Applicants would like to thank Examiner Truong for the indication that upon amending the claims as now amended and filing an RCE, the case would be considered allowable. The above amendments and following remarks summarize and further expand on the content of that discussion.

Claims 1-22 are active in this application. Claim 1 has been amended to specify that the end-capping group is a phenyl group. This amendment is supported by the specification at page 33, lines 6-15 and particularly in the examples. See, in particular, Example 1 which discloses a polymer according to the invention, having a phenyl end capping group, which was put on by the use of diethyl benzylphosphonate as end-capping agent. Additionally, Applicants note that in the previous amendment, claims 2-22 were indicated as "Previously Presented". The indicator should have been "Original". That has been corrected in this amendment. No new matter has been added by this amendment.

The present invention relates to a polymer having a repeating unit of formula (I):



wherein the polymer is end-capped by a phenyl group. Applicants have found that by endcapping the polymer with a phenyl group, the resulting transistors made using the present invention polymers provide significant improvements both in mobility and on/off ratio.

The claims stand rejected under 35 U.S.C. 102(b) over WO 97/09394. Applicants note that this reference neither discloses nor suggests the present invention polymers having a phenyl endcapping group. The present invention polymers specifically place a phenyl endcapping group at the terminus of the polymer in order to provide improved properties

when used in the production of transistors. This is nowhere disclosed in the reference nor is it suggested to do so in the reference.

Applicants have previously provided a Rule 1.132 Declaration showing that the mere act of endcapping with phenyl group provides significant differences in the performance of transistors made from the present polymers, compared to using a polymer having the same repeat unit, but no end-capping. In particular, the transistor made from the end-capped polymer of the present invention gave a mobility of 2.2×10^{-3} and an on/off ratio of 4.2×10^4 . However, the second transistor made from the non-end-capped polymer gave a mobility of 1.4×10^{-3} and an on/off ratio of 2.3×10^3 , each of which are significantly lower than the values obtained with the end-capped polymer. In fact, the mobility and on/off ratio of the transistor prepared with the end-capped polymer of the present invention were improved by factors of 1.6 and 18 times, respectively, when compared to the transistor formed from the non-end-capped polymer. This is important, since the polymers disclosed in the reference cited by the Examiner do not disclose end-capping of the polymers and only show non-end-capped polymers being used. The end-capping provides a significant difference in ultimate properties of the transistors being formed. Thus the presently claimed polymers are in fact different from those in the reference, and the reference cannot therefore anticipate the present invention. Further, even if the Examiner were to assert that the reference renders the present invention obvious, the results in the accompanying Rule 1.132 Declaration are sufficient to rebut such an assertion, as there is no suggestion in the cited reference that by endcapping the polymer with a phenyl group, one would be able to provide such significant improvements to the mobility and on/off ratio of transistors formed from the polymers, compared to using non-endcapped polymers as disclosed in the reference.

In the present Official Action, the Examiner indicates that the Rule 1.132 Declaration was not commensurate in scope with the claims, as the claim designates the endcapping

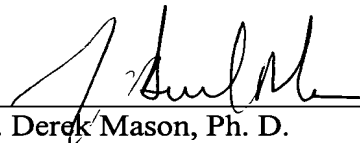
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group as an organic group, while only phenyl endcapping group has been shown. As the claims have now been amended to specify that the endcapping group is a phenyl group (such as that provided by using diethyl benzylphosphonate or benzaldehyde as the end-capping agent, as disclosed in the specification at page 33), the Declaration and claims are now believed to be commensurate in scope and the case should be in condition for allowance. Accordingly, the rejection should be withdrawn.

Applicants submit that the application is now in condition for allowance and early notification of such action is earnestly solicited.

Respectfully submitted,

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